

Application No. 10/583,966
Amendment dated May 10, 2011
Reply to Office Action of February 11, 2011

Docket No. 0649-1323PUS1
Art Unit: 3679
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AMENDMENTS TO THE DRAWINGS

One sheet of Replacement Drawings (FIG. 4) is attached at the end of this paper in order to delete reference numeral "28T." No new matter has been added.

REMARKS

The Applicants thank the Examiner for the consideration given the present application. Claims 6 and 11 were previously cancelled without prejudice to or disclaimer of the subject matter thereof. Claims 1, 2, 4, 5, 7-10, and 12-23 are pending. Claims 1, 2, 8, 17, and 18 are amended. Claims 1, 8, and 17 are independent. The Examiner is respectfully requested to reconsider the rejections in view of the amendments and remarks set forth herein.

Examiner Interview

The Applicants wish to thank Examiner Aaron Dunwoody for the courtesies extended to Applicants' Representative, Carl T. Thomsen, Registration No. 50,786, during the telephone interview which was conducted on April 21, 2011. During the interview, Applicant's Representative discussed proposed changes to the claims in an attempt to clarify to claimed subject matter. By way of this Amendment, the claims have been amended in the manner discussed during the interview, and are believed to place the application into condition for allowance. Accordingly, reconsideration and allowance of the present application are respectfully requested.

If, during further examination of the present application, a discussion with the Applicants' Representative would advance the prosecution of the present application, the Examiner is encouraged to contact Carl T. Thomsen, Registration No. 50,786, at 1-703-208-4030 (direct line) at his convenience.

Amendments to the Drawings

In response the Examiner's assertion that it is not proper to recite from "the ring-shaped end face 28F on a tip end 28T of the press-fitting portion 28" in claim 1, and as illustrated in FIG. 4, one sheet of Replacement Drawings (FIG. 4) is attached at the end of this paper in order to delete reference numeral "28T." No new matter has been added.

Amendments to the Specification

The Examiner has stated that the "Applicant is required to amend the disclosure to include the material incorporated by reference, if the material is relied upon to overcome any objection, rejection, or other requirement imposed by the Office." This objection is respectfully traversed.

In response, the Examiner is directed to the Substitute Specification filed on June 10, 2010 which is believed to satisfy the latest request by the Examiner.

In addition, paragraph [0095] has amended by way of this response in order to delete reference numeral "28T" in response to the Examiner's objection to the drawings. Further, paragraph [0078] has been amended to correct a typographical error.

Claim Objections

The Examiner has objected to the claims because they contain reference numerals not enclosed in parentheses. In order to overcome this objection, the Applicants have amended claims 1, 8 and 17 in order to correct the deficiencies pointed out by the Examiner. Reconsideration and withdrawal of this objection are respectfully requested.

Rejection Under 35 U.S.C. § 112, second paragraph

Claims 1, 2, 4, 5, 7-10 and 12-23 stand rejected under 35 U.S.C. § 112, second paragraph. This rejection is respectfully traversed.

The Examiner has set forth certain instances wherein the claim language is not clearly understood and/or lacks antecedent basis.

In order to overcome this rejection, the Applicants have amended claims 1, 8, and 17 to correct the deficiency specifically pointed out by the Examiner. The Applicants respectfully submit that the claims, as amended, particularly point out and distinctly claim the subject matter which the Applicants regard as the invention. Accordingly, reconsideration and withdrawal of this rejection are respectfully requested.

Rejections Under 35 U.S.C. § 103(a)

Claims 1, 2, 4, 5, 7-10 and 12-23 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Yokoyama et al. in view of Kodama et al. and Morain (U.S. 4,772,052).

These rejections are respectfully traversed.

Amendments to Independent Claims 1, 8, and 17

While not conceding the appropriateness of the Examiner's rejection, but merely to advance prosecution of the instant application, each of **independent claims 1, 8, and 17** has been amended herein to recite a combination of elements directed to a resin tube-equipped quick connector, including *inter alia*:

“wherein an exterior of the press-fitting portion consists of the following portions along an axial length L thereof, one immediately after another:

a first truncated-conical-shaped portion extending from a ring-shaped end face on a tip end of the press-fitting portion;

a first cylindrical-shaped root portion,

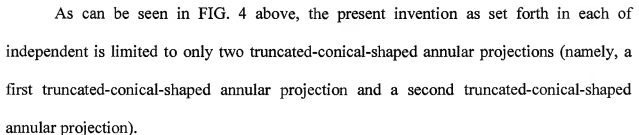
a first truncated-conical-shaped annular projection followed by a first ring-shaped face and a second cylindrical-shaped root projection,

a second truncated-conical-shaped annular projection followed by a second ring-shaped face and a third cylindrical-shaped root portion,

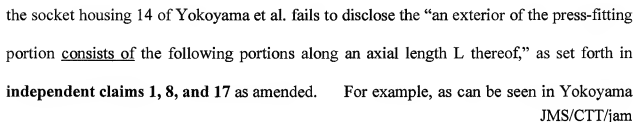
a second truncated-conical-shaped portion, which ends abutting with a flat ring-shaped end face of the connector body ...

wherein the C-shaped retainer includes a retainer-side engagement portion having first and second arc-shaped windows which open on opposite sides thereof in a radial direction, which are adapted to engage with a convex pipe-side engagement portion.”

Support for “an exterior of the press-fitting portion consists of the following portions along an axial length L thereof” and “the C-shaped retainer includes a retainer-side engagement portion having first and second arc-shaped windows which open on opposite sides thereof in a radial direction, which are adapted to engage with a convex pipe-side engagement portion,” as set forth in **independent claims 1, 8, and 17** as amended, can be found, for example, in **FIGS. 2-4**. (FIG. 4 is shown below.)



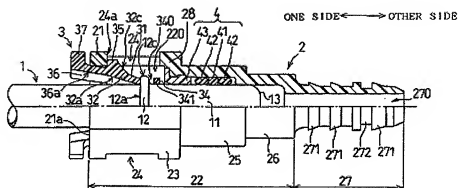
As can be seen in Yokoyama et al. FIG. 1 below,



et al. FIG. 1, this document discloses three hose fitting portions 14a, and circular retainer 19 that is not the same as the presently claimed C-shaped retainer.

Regarding the Kodama et al. Reference

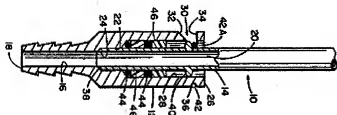
As can be seen in Kodama et al. FIG. 1 below,



the hose connector 27 of Kodama et al. fails to disclose the “an exterior of the press-fitting portion consists of the following portions along an axial length L thereof,” as set forth in **independent claims 1, 8, and 17** as amended. For example, as can be seen in Kodama et al. FIGS. 1 and 3, this document discloses three steps 271, and a U-shaped sealing groove 272 adjacent to a cylindrical portion on hose connector 27.

Regarding the Morain Reference

As can be seen in Morain FIG. 3 below,



the receptacle member first end 18 of Morain fails to disclose the “an exterior of the press-fitting portion consists of the following portions along an axial length L thereof,” as set forth in **independent claims 1, 8, and 17** as amended. For example, as can be seen in Morain FIG. 3, this document merely discloses three serrations 48 immediately following each other on receptacle member 12. In addition retention wire 42 bears no resemblance to the presently claimed C-shaped retainer.

Regarding References cited in Previous Office Actions

Washizu ‘216, Nishiyama et al. ‘225, Ostrander et al. ‘383, and Bock ‘998 were cited by the Examiner in previous Office Actions.

However, no combination of Washizu ‘216, Nishiyama et al. ‘225, Ostrander et al. ‘383, and Bock ‘998 can make up for the deficiencies of Yokoyama et al., Kodama et al. and Morain to teach or suggest the combination of elements now set forth in each of **independent claims 1, 8, and 17**.

As the Examiner knows well, a *prima facie* case of obviousness must be established in order for a rejection under 35 U.S.C. 103(a) to be proper.

M.P.E.P. section 2143 sets forth examples of basic requirements of a *prima facie* case of obviousness:

“The Supreme Court in *KSR International Co. v. Teleflex Inc.*, 550 U.S. ___, ___, 82 USPQ2d 1385, 1395-97 (2007) identified a number of rationales to support a conclusion of obviousness which are consistent with the proper “functional approach” to the determination of obviousness as laid down in *Graham*. The key to supporting any rejection under 35 U.S.C. 103 is the clear articulation of the reason(s) why the claimed invention would have been obvious. The Supreme Court in *KSR* noted that the analysis supporting a rejection under 35 U.S.C. 103 should be made explicit.”

One of the exemplary rationales that may support a conclusion of obviousness in accordance with the KSR decision is set forth in M.P.E.P. 2143 (C). This exemplary rationale relates to “use of known technique to improve similar devices (methods, or products) in the same way.”

Referring to M.P.E.P. 2143 (C), the following is stated:

“To reject a claim based on this rationale, Office personnel must resolve the *Graham* factual inquiries. Then, Office personnel must articulate the following:

- (1) a finding that the prior art contained a “base” device (method, or product) upon which the claimed invention can be seen as an “improvement;”
- (2) a finding that the prior art contained a “comparable” device (method, or product that is not the same as the base device) that has been improved in the same way as the claimed invention;
- (3) a finding that one of ordinary skill in the art could have applied the known “improvement” technique in the same way to the “base” device (method, or product) and the results would have been predictable to one of ordinary skill in the art; and

(4) whatever additional findings based on the *Graham* factual inquiries may be necessary, in view of the facts of the case under consideration, to explain a conclusion of obviousness.

The rationale to support a conclusion that the claim would have been obvious is that a method of enhancing a particular class of devices (methods, or products) has been made part of the ordinary capabilities of one skilled in the art based upon the teaching of such improvement in other situations. One of ordinary skill in the art would have been capable of applying this known method of enhancement to a “base” device (method, or product) in the prior art and the results would have been predictable to one of ordinary skill in the art. The Supreme Court in *KSR* noted that if the actual application of the technique would have been beyond the skill of one of ordinary skill in the art, then using the technique would not have been obvious. *KSR*, 550 U.S. at ___, 82 USPQ2d at 1396. If any of these findings cannot be made, then this rationale cannot be used to support a conclusion that the claim would have been obvious to one of ordinary skill in the art.” (*emphasis added*)

Regarding **item (1)** above, the Examiner appears to consider Yokoyama et al. as representing the prior art containing a “base” device upon which the claimed invention can be seen as an “improvement.”

As discussed above, as can be seen in Yokoyama et al. FIG. 1, this document discloses three hose fitting portions **14a**, and circular retainer **19** that is not the same as the presently claimed C-shaped retainer.

Regarding **item (2)** above, the Examiner appears to consider the combination of Kodama et al. and Morain as representing the prior art containing a “comparable” device that has been improved in the same way as the claimed invention.

However as discussed above,

Kodama et al. FIGS. 1 and 3 disclose three steps 271, and a U-shaped sealing groove 272 adjacent to a cylindrical portion on hose connector 27, and

Morain FIG. 3 discloses three serrations 48 immediately following each other on receptacle member 12. In addition retention wire 42 bears no resemblance to the presently claimed C-shaped retainer.

Since Yokoyama et al. disclose three hose fitting portions 14a, no combination of Kodama et al. (which disclose three steps 271, and a U-shaped sealing groove 272 adjacent to a cylindrical portion on hose connector 27), and Morain FIG. 3 (which merely discloses three serrations 48 immediately following each other on receptacle member 12. can be combined with Yokoyama et al., to arrive at the apparatus set forth in each of **independents 1, 8, and 17**, which is limited to only two truncated-conical-shaped annular projections (namely, a first truncated-conical-shaped annular projection and a second truncated-conical-shaped annular projection).

The Applicant respectfully submits that the Examiner has failed to articulate at least **items (1) and (2)** above as is required.

In view of the above, the Applicants respectfully submit that the Examiner has failed to establish a *prima facie* case of obviousness.

At least for the reasons explained above, Applicants respectfully submit that the combination of elements as set forth in each of **independent claims 1, 8, and 17** is not

disclosed or made obvious by the prior art of record, including Yokoyama et al, Kodama et al., Morain, Washizu '216, Nishiyama et al. '225, Ostrander et al. '383, and Bock '998.

Therefore, **independent claims 1, 8, and 17** are in condition for allowance.

Dependent Claims

The Examiner will note that dependent claims 2 and 18 have been amended to place them in better form. All dependent claims are in condition for allowance due to their dependency from allowable independent claims, or due to the additional novel features set forth therein.

All pending claims are now in condition for allowance. Accordingly, reconsideration and withdrawal of the rejections under 35 U.S.C. §103(a) and §112, second paragraph are respectfully requested.

CONCLUSION

It is believed that a full and complete response has been made to the outstanding Office Action, and that the present application is in condition for allowance.

If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, he is invited to telephone Carl T. Thomsen (Reg. No. 50,786) at (703) 208-4030 (direct line).


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If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§1.16 or 1.17, particularly extension of time fees.

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Respectfully submitted,

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Attachments: One sheet of Replacement Drawings (FIG. 4).